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6 June 2002
C6-BRC-T-02-015

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
Los Angeles Region
320 W. 4th Street, Suite 200
Los Angeles, CA 90013

Attention: John Geroch

Subject: **PARCEL C SIMUPROBE GROUNDWATER PROFILING -
WORKPLAN, FOR BOEING REALTY CORPORATION, FORMER
C-6 FACILITY, 19503 SOUTH NORMANDIE AVENUE, LOS
ANGELES, CA**

Dear Mr. Geroch:

Please find enclosed for your review, a copy of the subject document prepared by
Haley & Aldrich Inc, for Boeing Realty Corporation.

If you have any questions concerning this document, please contact the undersigned
at 562-593-8623.

Sincerely,



Stephanie Sibbett
Boeing Realty Corporation

Cc: Mario Stavale, Boeing Realty Corporation

enclosure



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27 May 2002
File No. 28882-002

Boeing Realty Corporation
3855 Lakewood Blvd.
Building 1A MC D001-0097
Long Beach, CA 90846

Attention: Mr. Brian Mossman

Subject: Parcel C Simulprobe Groundwater Profiling- Workplan
Boeing Realty Corporation
Former C-6 Facility, Los Angeles, California

Dear Mr. Mossman:

This workplan has been prepared for continuing supplemental groundwater characterization activities related to redevelopment at Boeing Realty Corporation's (BRC) Former C-6 Facility (Site) in Los Angeles, California (Figure 1). This workplan proposes three groundwater reconnaissance locations in the Building 2 area to further delineate source-area groundwater impacts using a drilling rig and Simulprobe sampling equipment. The following sections of this workplan present a Site background, the proposed groundwater reconnaissance sampling, and reporting.

Site Hydrogeology

Groundwater at the Site is located in sediments of the Bellflower Aquitard, which has two sub-units, the Middle Bellflower Aquitard and the Lower Bellflower Aquitard. The uppermost groundwater appears to be under water table conditions at depths of 60 to 70 feet below ground surface (bgs). The following sections briefly discuss the Site-specific water-bearing units of the Middle Bellflower Aquitard (Poland and others, 1959 and Department of Water Resources [DWR], 1961).

1. Middle Bellflower Aquitard

The Middle Bellflower Aquitard is a massive, light yellowish brown, fine to medium sand with local muddy zones. An extensive mud layer referred to as the Middle Bellflower mud (MBFM) locally interrupts this sand. Where divided, the top sand subunits are referred to as the B-Sand (MBFB) and the bottom sand subunits are referred to as the C-Sand (MBFC). The MBFM is

C-6SimulprobeV.workplan

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California

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Arizona

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discontinuous across the area and is comprised of laminated silts and layered silts and very fine sands.

a. *B-Sand (MBFB)*

The B-Sand is found at an approximate depth of 30 feet bgs at the Site and is generally from 25 to 60 feet thick. The B-Sand is found at different depths across the Site, but typically extends to a depth of approximately 85 feet bgs (-33 feet mean sea level [msl]). The B-Sand predominantly consists of interbedded fine sands and silts. The groundwater flow within the B-sand at the Site is generally to the south-southeast.

b. *Middle Bellflower Mud (MBFM)*

The MBFM is found at an approximate depth of 87 to 101 feet bgs at the Site (-35 to -49 feet msl) and ranges in thickness from 2 to 25 feet.

c. *C-Sand (MBFC)*

The C-Sand is found at an approximate depth of 95 to 110 feet bgs at the Site (-43 to -58 feet msl), is 10 to 26 feet thick, and extends to a depth of up to approximately 125 feet bgs (-73 feet msl). The C-Sand predominantly consists of interbedded medium to fine sands. The groundwater flow direction in the C-sand is reported to be to the southeast.

2. *Lower Bellflower Aquitard (LBF)*

The Lower Bellflower Aquitard (LBF) is reported to be continuous across the area. It occurs at an approximate depth of 110 to 120 feet bgs and ranges in thickness from 10 to 25 feet. The LBF is a fine-grained silty clay to silt and separates the Bellflower sands from the underlying Gage Aquifer.

The previous phases of groundwater reconnaissance at the Site identified volatile organic compound (VOC) impacts in both the B-sand and C-sand units. The eastern extent of these VOC impacts were not identified in the former Building 2 area along Normandie Avenue in the southeast portion of the Site. Three additional Simulprobe locations are proposed to further delineate the horizontal characteristics of the Bellflower aquitard in this area.

2.0 Proposed Groundwater Reconnaissance Program

The proposed soil borings (DDS-2-27 through DDS-2-29) will be drilled to approximately 130 feet bgs. Two Simulprobe groundwater samples per boring will be collected, approximately 90 to 100 (bottom of B-Sand) and 120 to 130 feet bgs (bottom of C-Sand). The soil borings will be drilled using a hollow stem auger drill rig and the geological characteristics of each soil boring will be logged via soil cuttings.

One duplicate groundwater sample will be collected at one location to check for sampling and analytical precision. The duplicate will be collected, numbered, packaged, and sealed in the same manner as the other samples. Duplicates will be assigned separate sample numbers and submitted blind to the laboratory.

One equipment blank will also be collected when sampling equipment is cleaned and re-used in the field. Potable water will be used to rinse the sampling equipment after the equipment has been cleaned, and then a rinse water sample will be collected in the sample containers. The equipment rinse blank is a check for cross-contamination during sample collection.

The six Simulprobe groundwater samples, one duplicate sample, and one equipment blank will be submitted to Severn Trent Laboratories (STL) Los Angeles for analysis under chain of custody protocol. Each sample will be analyzed for VOCs and tentatively identified compounds (TICs) via U.S. EPA Method 8260B.

3.0 Health and Safety

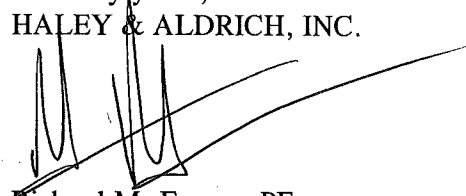
The work will be performed under our Site-Specific Health and Safety Plan (H&S Plan) dated June 8, 2001, that complies with the federal Occupational Safety and Health Act (OSHA) standards for potentially hazardous field investigations (29CFR 1910.120). The H&S Plan was previously submitted to the Los Angeles Regional Water Quality Control Board (LARWQCB) who reviewed the document and reported it to be adequate.

4.0 Reporting


Once the drilling and analytical program has been completed, the findings will be included in the Site-Wide Supplemental Groundwater Characterization Report. This report will be submitted to the LARWQCB by February 28, 2003.

If you have any questions, please do not hesitate to contact the undersigned at (619) 280-9210.

Sincerely yours,
HALEY & ALDRICH, INC.


Richard M. Farson, PE
Senior Engineer




Scott Zachary
Project Manager

Attachments:

Figure 1 - Site Location Map
Figure 2 - Simulprobe Location

References

1. Poland, J.K., Garnett, A.A., and Sinnott, A., 1959, Geology, Hydrology and Chemical Characteristics of the Ground Waters in the Torrance-Santa Monica Area, California; USGS Water Supply Paper 1461.
2. State of California, Department of Water Resources, 1961, Planned Utilization of the Ground Water Basins of the Coastal Plain of Los Angeles County, Appendix A Ground Water Geology.

FIGURES

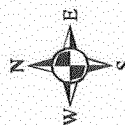


Figure 1
Site Location Map

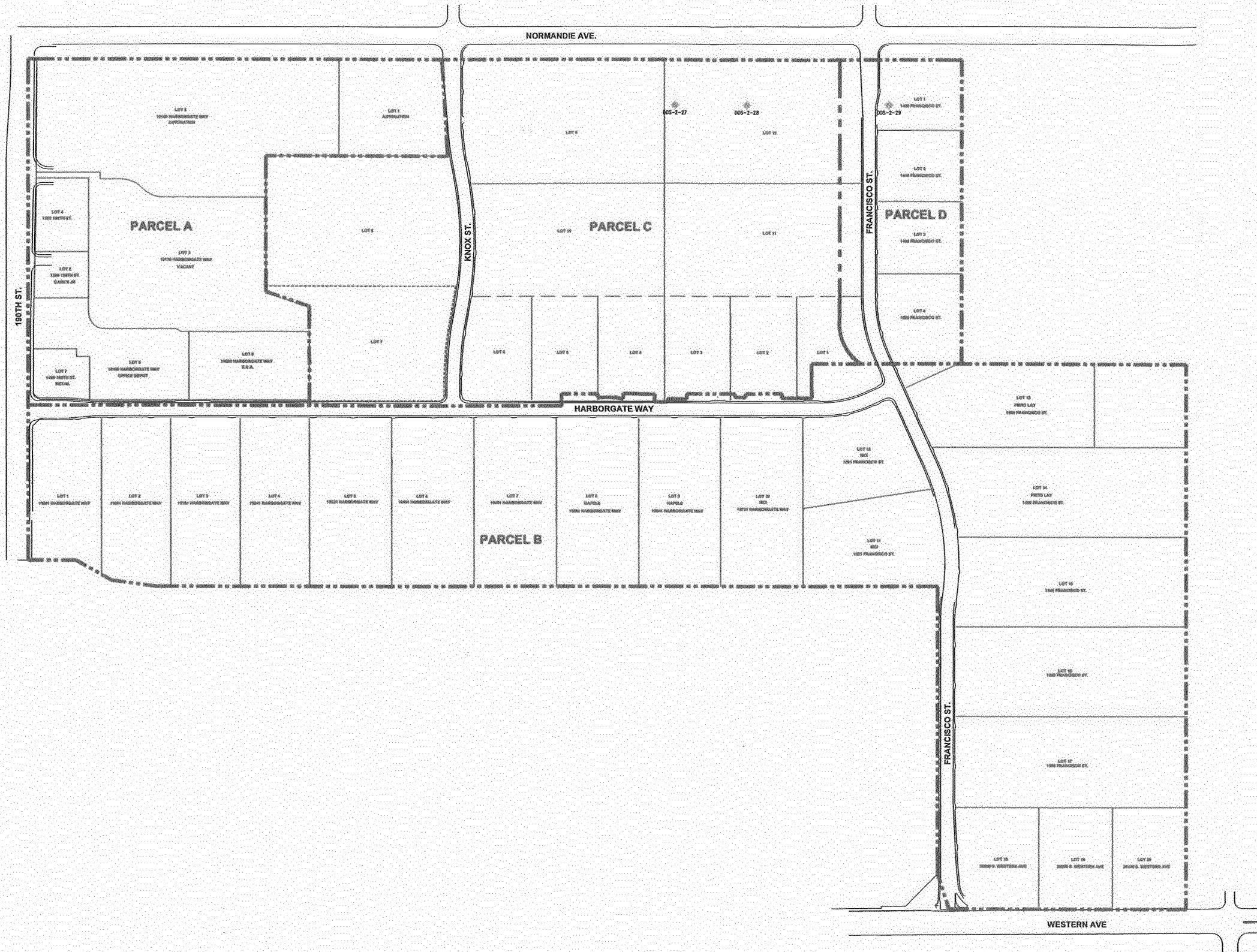
Boeing Realty Corporation
Former C-6 Facility
Los Angeles, California



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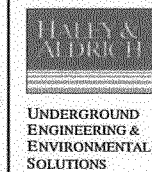
Scale : As Shown QA/QC : Project : 27285

Drawn : DFM Reviewed : SP2 Date : 1 March 2002



- LEGEND**
- PARCEL BOUNDARY
 - PROPOSED SUMULPROBE LOCATION

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BOEING REALTY CORPORATION
FORMER C-6 FACILITY
LOS ANGELES, CALIFORNIA

PROPOSED SIMULPROBE LOCATIONS

SCALE: AS SHOWN	PROJECT: 27936
DRAWN: SAL	REVIEWED: RMF
DATE: 27 MAY 2002	

FIGURE: 2